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Cooperatives' Position in the Potato Industry

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Cooperatives' Position in the Potato Industry

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Abstract

Potato bargaining cooperatives representing more than 3,000 growers bargain for nearly 60 percent of the United States processed potato crop. Potato marketing cooperatives serving more than 2,500 growers in all crop areas handle 8 percent of the fresh tablestock, 8 percent of the seed potatoes, and 5 percent of the chipping potatoes.

Important interests of bargaining associations are stronger bargaining legislation and greater grower commitment. Important concerns of marketing associations are industry instability and improved quality control.

Key Words: Potatoes, cooperatives, bargaining, marketing.

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Preface

Potatoes are the most important vegetable crop in terms of tonnage and value grown in the United States. In 1980 they accounted for 40 percent of the processed and 27 percent of the fresh market vegetables. Thirty-eight States grow enough potatoes to be considered commercial producers. The objective of this report is to determine the current status of bargaining and marketing cooperatives in the U.S. potato industry.

The report presents a brief overview of the U.S. potato industry and a short profile of both the fresh and processing industries. The focus is on the role of bargaining and marketing cooperatives. The bargaining associations representing over 3,000 growers bargain for nearly 60 percent of the processed crop. Marketing associations serve more than 2,500 growers and handle 8 percent of the fresh tablestock, 8 percent of the seed potatoes, and 5 percent of chipping potatoes.

Acknowledgment is made to the managers of potato bargaining and marketing associations, leaders in the potato industry, and other State and USDA agencies including ERS, SRS, and AMS.

Firm names are used in this report solely to provide specific information. Their use does not imply approval or constitute endorsement by the U.S. Department of Agriculture.

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Summary and Implications

Potatoes are the most important vegetable crop grown in the United States, both for fresh market and processing. Potatoes accounted for 40 percent of the processed and 27 percent of fresh market vegetable tonnage in 1980. Per capita consumption of fresh potatoes has declined while per capita consumption of processed potato products has increased from 39.3 pounds in 1965 to 65.5 pounds in 1981. The shift in utilization from fresh to processed form led to the development of preseason contracts. Growers found it necessary to organize bargaining associations and negotiate with processors for price and terms of trade.

The bargaining associations saw a great need for new Federal bargaining legislation. The Agricultural Fair Practices Act of 1967 was called ineffective due to the difficulty of documenting complaints, the lack of good faith bargaining, and enforcement procedures. Strong Federal legislation would prevent processors with plants in different areas from playing one group of growers against another and counteract certain processor tactics experienced by bargaining associations.

Most associations hoped to strengthen their roles in the potato industry during the next 5 years through increased membership. Grower commitment is currently a problem for associations. Greater grower commitment is needed to strengthen the associations in their dealing with processors and prevent processors from using their tactics as freely.

More emphasis by some marketing associations on direct sales might result in some savings in brokerage fees. If more sales could be made on an f.o.b. basis, the associations or growers would be assuming fewer risks. The possibility of shipping by rail should be explored.

Forty-five percent of sales were inspected by growers, 44 percent by the Federal-State Inspection Service, and 11 percent by the associations.

Seventy-two percent of the potatoes were sold under association labels, 12 percent under grower labels, 3 percent under chain store labels, 2 percent under other buyer labels, and 11 percent unlabeled. Because 28 percent of sales were not made under association labels, perhaps they should be promoted more.

The Federal-State Market News Service and telephone contacts with the trade were the major sources of price information.

All associations expect the trend toward fewer and larger growers to continue in the next 5 years. More than 80 percent of the associations did not anticipate any change in growers' willingness to market cooperatively. More than 71 percent thought growers would be delivering a better quality potato due to new varieties, improved fertilizers, and a decline in the number of growers producing low-quality potatoes. Nearly 60 percent of the associations expected an increase in on-farm storage.

Almost three-fourths of the associations cited industry instability as a problem. Other problems included international trade, market information, potato varieties, storage, consumer orientation, lack of market share, and transportation.

There seemed to be a desire and need for better quality control. Growers were packing and grading their own potatoes in a high proportion of associations. Because variation may occur in the quality of the pack from one grower to another, possibly a greater use could be made of the Federal-State Inspection Service. Growers could choose to have the associations do the packing for better quality control. If storage facilities were constructed on the premises instead of on the farms, storage conditions could be monitored better.

More than half of the associations had no marketing contracts with their members and felt they were holding a price umbrella for nonmembers. A more active member relations program might help bring in more nonmembers.

Cooperatives' Position in the Potato Industry

Gilbert W. Biggs
Agricultural Economist

OVERVIEW

Potatoes are the most important vegetable crop in terms of tonnage and value grown in the United States. Potatoes ranked first among the principal vegetables processed in 1980, accounting for 40 percent of the total tonnage. Potatoes also accounted for 27 percent of the tonnage of the principal vegetables produced in 1980 for the fresh market.

Thirty-eight States grow enough potatoes to be considered commercial producers. Although the number of potato farms has declined, better varieties and improved cultural practices have increased production.

Production

U.S. farmers produced more than 338 million hundredweight of potatoes in 1981 (table 1). The winter crop accounted for 1 percent; the spring crop, 6 percent; the summer crop, 6 percent; and the fall crop, 87 percent. Florida and California produce the winter crop, harvested in January through March. California and Florida along with five other States produce the spring crop, harvested in April through June. California produces about half of the spring crop while Florida produces about a fourth.

The summer crop is harvested in July through September. This crop is produced in 18 States of which California is the leader with almost 3 million hundredweight. Virginia and New Jersey each produce more than 2 million hundredweight. The seven leading fall potato-producing States accounted for about 80 percent of the fall crop and 70 percent of U.S. production in 1981. These States, in order of production, were Idaho, Washington, Maine, Oregon, North Dakota, Wisconsin, and Minnesota. The fall crop is harvested in October through December. However, in some areas, harvesting may begin in August and end in early November, depending on weather conditions.

Utilization

During the period 1977-81, an average of 110 million hundredweight of potatoes, or 32 percent of the crop, was used as fresh tablestock (table 2). More than 167 million hundredweight, or 49 percent, was processed. Almost half of the processed potatoes, or 22 percent, went into frozen french fries. Chips and shoestrings accounted for 11 percent; dehydrated products, 9 percent; and the remainder was processed into other frozen products, canned products, and starch and flour. Other sales accounted for 8 percent of production. These included livestock feed, seed, and some diverted potatoes. Seed accounted for about 6 percent of these other sales. About 10 percent of production was accounted for by nonsales. These included seed used on farms where grown, household use and use for feed on farms where grown, and shrinkage and loss. Shrinkage and loss accounted for most of the nonsales.

About 80 percent of the potato crop was used for food products; the remainder went for nonfood uses (fig. 1). Of the potatoes used for food, about 60 percent went for processed products while 40 percent went for fresh or tablestock potatoes (fig. 2).

FRESH POTATO INDUSTRY

Many growers produce both for processing and tablestock. Per capita consumption of tablestock potatoes has declined in recent years but still accounted for more than 40 percent of total per capita potato consumption in 1981.

About 1,440 potato shippers are at 670 shipping points throughout the United States (fig. 3). The term shipper as used here includes firms at shipping points where potatoes are produced. This would include brokers as well as firms that purchase fresh potatoes from growers and pack them for shipment. Many of these firms handle seed potatoes and also ship potatoes for chipping. Cooperatives are among these firms.

Table 1—Potato production by seasonal groups and State, 1981 crop

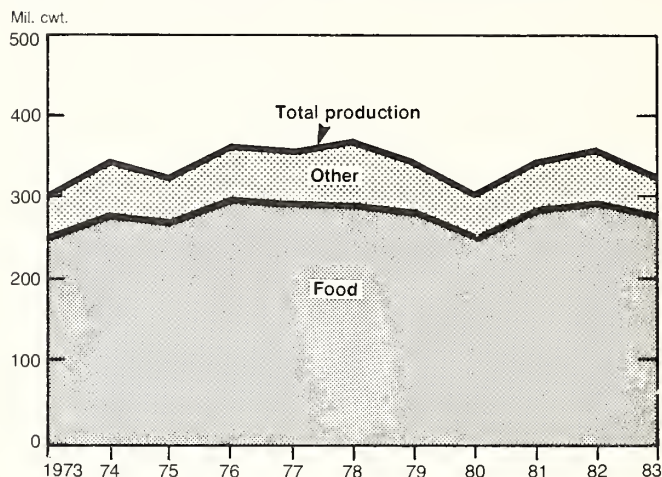
Season and State	Production 1,000 cwt.
Winter:	
Florida.....	1,302
California.....	896
Total winter.....	2,198
Spring:	
California.....	10,296
Florida.....	5,263
North Carolina.....	2,062
Arizona.....	1,456
Texas.....	840
Alabama.....	720
Louisiana.....	128
Total spring.....	20,765
Summer:	
California.....	2,960
Virginia.....	2,320
New Jersey.....	2,066
Colorado.....	1,904
Minnesota.....	1,647
Texas.....	1,541
Michigan.....	1,453
Total top 7.....	13,891
Other 11 States ¹	6,144
Total summer.....	20,035
Fall:	
Idaho.....	84,540
Washington.....	52,920
Maine.....	26,520
Oregon.....	21,710
North Dakota.....	20,125
Wisconsin.....	18,190
Minnesota.....	13,300
Total top 7.....	237,305
Other 17 States ²	58,288
Total fall.....	295,593
Total U.S. crop.....	338,591

¹Includes: Alabama, Delaware, Illinois, Indiana, Iowa, Maryland, Nebraska, New Mexico, North Carolina, Ohio, and Tennessee.

²Includes: California, Colorado, Connecticut, Indiana, Massachusetts, Michigan, Montana, Nebraska, Nevada, New York, Ohio, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, and Wyoming.

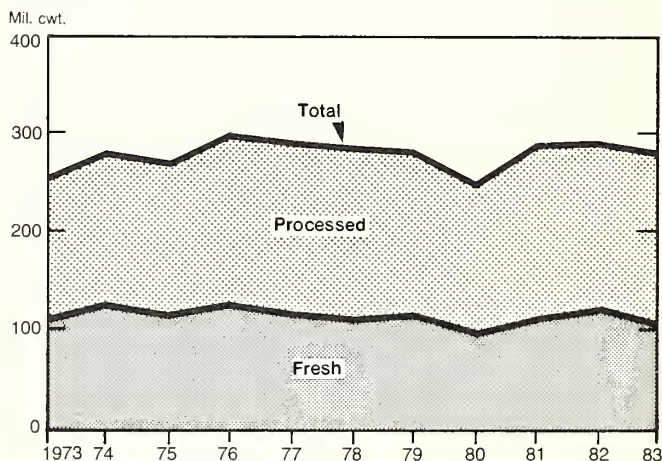
Source: Compiled from: Potatoes and Sweetpotatoes, Statistical Reporting Service, United States Department of Agriculture, September 1982, p. 7.

Figure 1—Potatoes Used for Food and Other Uses



Source: Based on data from the Economic Research Service and Statistical Reporting Service, United States Department of Agriculture.

Figure 2—Potatoes Used for Food: Fresh and Processed



Source: Based on data from the Economic Research Service and Statistical Reporting Service, United States Department of Agriculture.

POTATO PROCESSING INDUSTRY

Per capita consumption of processed potato products has increased from 39.3 pounds in 1965 to 65.5 pounds in 1981 (table 3). Per capita consumption of processed potato products has continually exceeded per capita consumption of fresh potatoes since 1970. Most of the growth of processed potatoes was in frozen products, primarily french fries (fig. 4).

The bulk of potato processing plants are in the major fall-producing States. Storage facilities in these States make processing almost a year-round operation.

Some 53 plants handle the major share of frozen and dehydrated potato processing. With few exceptions, these plants are in areas of large production. The 169 potato chip plants in the United States are, for the most part, near large consuming areas throughout the United States and usually deliver the product to the retailer's shelf.

Single Versus Multiple-Plant Ownership

Seventeen plants were owned by one firm or a subsidiary of a larger firm (table 4). Thirty-six plants were owned by 11 firms or a subsidiary of a larger firm (table 5).

Table 2—Potatoes: Utilization of the 1977-81 crops

Utilization items	1977	1978	1979	1980	1981	Average 1977-81	Percent
	----- 1,000 cwt. -----						Percent
Sales							
Table stock	117,171	112,096	114,957	96,817	110,639	110,336	32.35
For processing:							
Chips and shoestrings.....	36,947	37,839	38,276	37,894	38,344	37,860	11.10
Dehydration	32,783	33,243	30,784	28,222	30,162	31,039	9.10
Frozen french fries.....	79,949	79,539	74,320	67,208	79,844	76,172	22.33
Other frozen products.....	14,597	15,406	14,420	13,673	16,812	14,982	4.39
Canned potatoes.....	2,797	2,660	2,479	2,054	2,469	2,492	0.73
Other canned products (hash, stews, soups).....	2,474	2,127	2,251	1,993	1,700	2,109	0.62
Starch and flour	2,355	3,460	3,574	2,186	2,435	2,802	0.82
Total.....	171,902	174,274	166,104	153,230	171,766	167,456	49.09
Other sales:							
Livestock feed.....	7,396	7,173	6,636	3,903	3,583	5,738	1.68
Seed.....	21,028	19,990	18,179	19,152	20,503	19,770	5.80
Total diverted ¹	0	12,040	491	0	0	2,506	0.73
Total.....	28,424	39,203	25,306	23,055	24,086	28,014	8.21
Total sales.....	317,497	325,573	306,367	273,102	306,491	305,806	89.65
Nonsales							
Seed used on farms where grown.....	4,961	4,634	4,257	4,970	4,530	4,670	1.37
Household use and used for feed on farms where grown	1,757	1,668	1,666	1,416	1,444	1,590	0.46
Shrinkage and loss	31,119	34,439	30,207	23,369	26,126	29,052	8.52
Total nonsales.....	37,837	40,741	36,130	29,755	32,100	35,312	10.35
Total production	355,334	366,314	342,497	302,857	338,591	341,118	100.00

Source: Potatoes and Sweetpotatoes, Economics and Statistics Service, United States Department of Agriculture, Statistical Bulletin No. 645, Dec. 1980, p.27 Potatoes and Sweetpotatoes, Statistical Reporting Service, United States Department of Agriculture, September 1982, p. 12

¹Quantity of potatoes sold for livestock feed and starch under the USDA diversion program.

Table 3—Production and per capita consumption of potatoes, 1965-81

Year	Production	Per capita consumption						
		Total fresh and processed	Fresh	Processed ¹				
				Total ²	Canned ³	Frozen	Chips & shoe- strings	Dehy- drated
	<i>Million cwt.</i>			<i>Pounds</i>				
1965	291.1	107.1	67.9	39.3	1.7	14.3	15.8	7.0
1966	307.2	117.0	72.0	44.9	1.7	17.3	16.7	8.7
1967	305.8	108.6	62.1	46.5	1.7	19.0	16.8	8.4
1968	295.4	115.5	65.7	49.8	1.9	21.2	17.1	9.1
1969	321.6	117.0	61.3	55.7	2.0	24.6	17.7	11.0
1970	325.7	116.8	57.3	59.5	2.0	27.7	17.6	11.8
1971	319.3	118.3	56.0	62.2	2.1	30.2	17.3	12.1
1972	296.4	118.8	56.6	62.2	2.2	30.5	16.9	12.3
1973	300.0	115.9	51.1	64.8	2.3	32.9	16.5	12.7
1974	342.4	113.2	47.4	65.8	2.3	32.7	16.0	14.4
1975	322.0	120.5	53.8	66.7	2.0	34.3	15.7	14.4
1976	357.7	115.1	50.5	64.6	1.9	36.4	16.0	10.0
1977	355.3	120.3	53.6	66.7	2.2	36.5	16.6	11.1
1978	366.3	121.1	51.5	69.6	2.2	38.8	17.0	11.3
1979	342.5	124.3	59.0	65.3	2.1	35.4	17.1	10.4
1980	302.9	117.7	55.8	61.9	1.9	33.7	16.9	9.1
1981 ⁴	338.6	114.6	49.1	65.5	1.8	36.3	16.7	10.3
1977-81Av.	341.1	119.6	53.8	65.8	2.0	36.1	16.9	10.4

¹Fresh-weight basis.

²Includes flour.

³Includes potatoes canned in soups, stews, and other combinations.

⁴Preliminary.

Source: Vegetable Outlook and Situation, Economic Research Service,
United States Department of Agriculture, TY-226, October 1982, p.16.

Table 4—Potato processing facilities, single-plant operations, 1981

Firm (subsidiary)	State	Location
AFK Foods, Inc.		
(Potato Services Div.)	ME	Presque Isle
Consolidated Foods Corp.		
(Idaho Frozen Foods Corp.)	ID	Twin Falls
Hanover Brands, Inc.....	PA	Centre Hall
Idaho Fresh-Pack, Inc.....	ID	Lewisville
Idaho Supreme Potatoes, Inc.	ID	Firth
Magic Valley Foods	ID	Rupert
Mid-America Potato Co.....	MI	Grand Rapids
Millers Pre-pared Potato Co.	IL	Blue Island
Oregon Potato Co.	OR	Boardman
Potato Processing Co.....	GA	Atlanta
Potato Processing Co.....	IA	Des Moines
Pro-Ida Foods.....	ID	Ririe
Reckitt & Coleman Ltd.		
(The R.T. French Co.)	ID	Shelly
Redi-Spuds of America.....	CA	Hawthorne
Rogers Walla Walla Inc. ...	WA	Pasco
Twin City Foods, Inc.....	WA	Prosser
Winnemucca Farms Corp.		
(Katie Foods)	NV	Winnemucca

Figure 3—Fresh Potato Shippers at Shipping Points

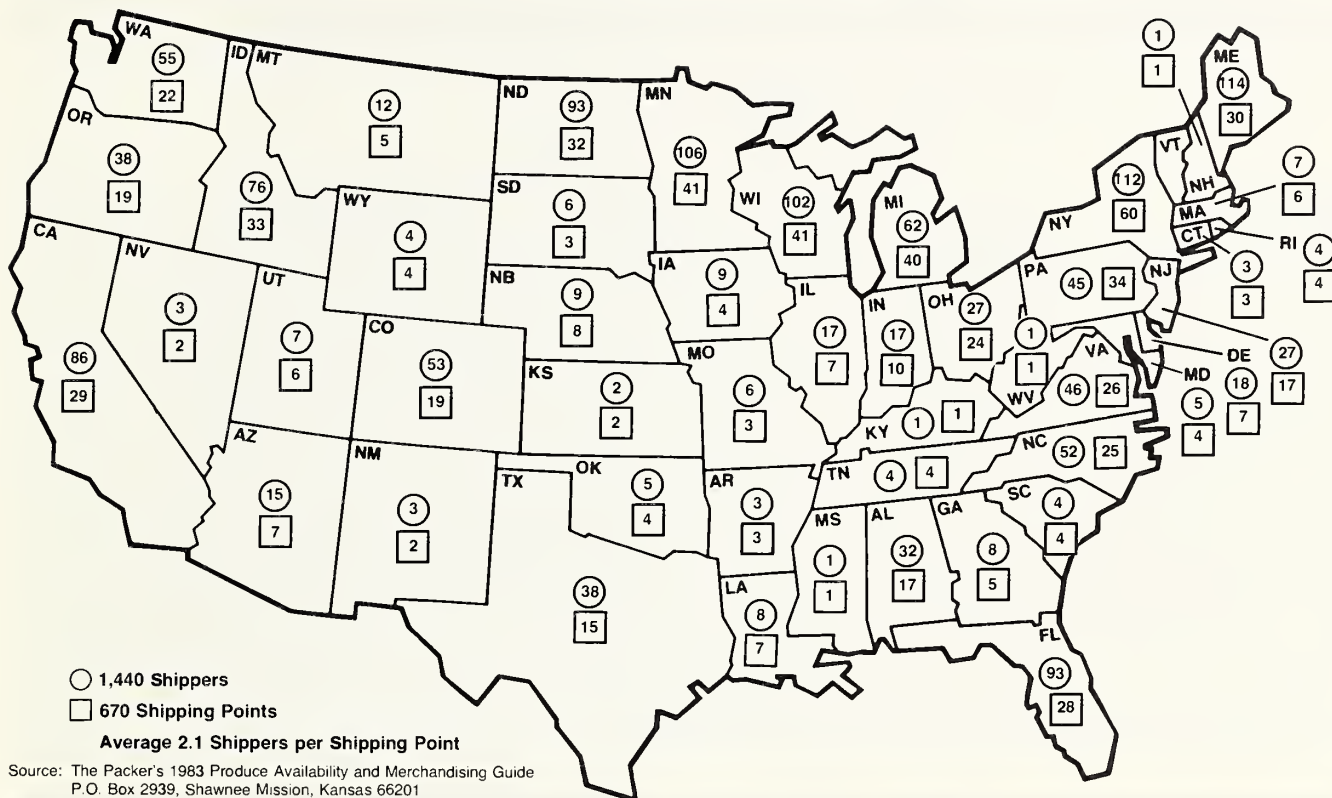
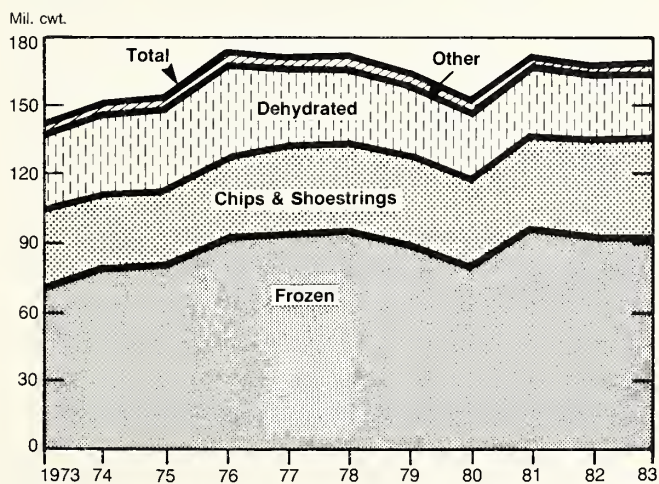


Figure 4—Potatoes Used for Processed Food Items



Source: Based on data from the Economic Research Service and Statistical Reporting Service, United States Department of Agriculture.

Table 5—Potato processing facilities, multiple-plant operations, 1981

Firm (subsidiary)	State	Location
Ampco Foods Inc. (American Potato Co. Div.)	ID	Blackfoot
	WA	Moses Lake
	WI	Plover
	ID	Rexburg
Amfac, Inc. (Lamb-Weston Div.)	ID	American Falls
	OR	Hermiston
	OR	Weston
	WA	Connell
	WA	Quincy
	WA	Richland
Carnation Co. (Processed Potato Div.)	ID	Nampa
	WA	Moses Lake
	WA	Othello
H.J. Heinz Co. (Ore-Ida Foods, Inc.)	OR	Ontario
	ID	Burley
	MI	Greenville
	WI	Plover
McCain Foods, Ltd (McCain Foods, Inc.)	ME	Washburn
	ME	Easton
Nonpareil Processing Corp.....	ID	Blackfoot
	CO	Monte Vista
Processed Potatoes, Inc.	MN	Minneapolis
(Northern Star Co. Div.).....	MN	Minneapolis
J.R. Simplot Co. (Food Div.)	ID	Aberdeen
	ID	Burley
	ID	Heyburn
	ID	Caldwell
	OR	Hermiston
	ND	Grand Forks
P.J. Taggares Co. (Chef-Reddy Foods Corp.).....	WA	Othello
(Chef-Reddy Foods Midwest Div.)	SD	Clark
(Chef-Reddy Foods/Minnesota Div.)	MN	Park Rapids
U & I Inc.	OR	Boardman
	OR	Metolius
Western Idaho Potato Processing Co. (Washington Div.)	ID	Nampa
	WA	Zillah

The 17 single-plant firms owned 32 percent of the potato processing plants while the 11 multiple-plant firms owned 68 percent of the plants. Several of the multiple-plant firms owned plants in more than one production area. In the Pacific Northwest, Amfac, Inc., J.R. Simplot Co., Ampco Foods, Inc., and Carnation Company owned 17 of 25 plants.

Growers

The shift from fresh to processed potatoes led to the development of preseason contracts. These contracts established the price for a large share of processing potatoes before the crop was planted. Because many growers were needed to supply the volume necessary for a processing plant, the traditional open market for tablestock potatoes was not satisfactory. Growers then organized bargaining associations to negotiate for price and terms of trade.

POTATO BARGAINING ASSOCIATIONS

Bargaining associations play an important role in the potato processing industry. Seven associations bargained for an average of more than 76 million hundredweight of potatoes out of the average yearly amount processed of more than 129 million hundredweight during the 1977-81 period (table 6). On the average, they accounted for 59 percent of the crop processed during the 1977-81 period. This did not include potatoes processed into chips and shoestrings.

Table 6—Share of processed potatoes involved in negotiations by seven bargaining associations, 1977-81

Year	U.S. crop ¹ processed	Subject to negotiations	
		Quantity	Share
		----- 1,000 cwt -----	Percent
1977	134,958	78,591	58
1978	136,479	76,912	56
1979	127,828	85,315	67
1980	115,336	65,781	57
1981	133,422	75,018	56
Average 1977-81	129,605	76,323	59

¹ Does not include chips and shoestrings.



A typical Maine potato farm. Maine ranks third in fall crop production, behind Idaho and Washington.

The five major potato bargaining associations are in the areas that produce the late summer and fall potatoes. In 1981, these associations had a membership of more than 3,000 growers.

Membership and Operation

Three of the five associations have lost membership over the past 5 years while the other two have remained stable. One has had a relatively stable membership for nearly 20 years.

The reasons for the membership decline varied. In two associations, growers have gone out of the potato business due to economic conditions. Members of a third quit because they disagreed with the association's bargaining position with processors.

Associations normally begin bargaining as early in the year as possible. Two began in January and another in November of the year before the crop was to be planted. One association bargained at any time because it had some 2-year contracts.

Major benefits of associations Associations felt their principal benefit to members was to get higher prices for their potatoes. They set the tone for the industry through their bargained prices. They also tried to work out difficulties between growers and processors.

Associations served as an umbrella for nonmembers. One association thought that nonmembers should pay a service fee because they benefited from the activities without being subject to the checkoff. Another association noted that nonmembers used the same contracts as members.

Associations stressed the importance of the processor having a guaranteed supply of potatoes.

Directors The number of directors in the five bargaining associations varied from 8 to 74. The association with 74 directors actually was governed by a 14-member executive committee composed of 7 district directors and 7 officers.



Seed potatoes being loaded into a planter. Both seed and fertilizer are being applied in a once-over operation.

Term of office varied from 2 to 4 years and most associations allowed directors to serve more than one term. Meetings were held an average of one per month except during negotiations when meetings of necessity were held more frequently. Compensation varied from nothing to a small fixed amount for meetings.

Employees Associations usually had a minimum of full-time paid employees, an executive director or manager, and a small office staff. The staff size depended on the size of the organization. One small association had no paid employees. The president and secretary-treasurer handled correspondence and served on the bargaining committee. A larger association employed a full-time field manager and nine part-time plant representatives who were present at plants when samples were being taken. This was in addition to its executive director and office staff.

Sources of revenue The main source of revenue for the associations was a small checkoff from the growers' payment by the processor and sent to the association. Checkoffs varied from one association to another for example: One-half of 1 percent of gross sales up to a maximum of \$1,600 by one association, 2 cents per hundredweight for another, 1 cent per hundredweight for another association, 1-1/4 cents per hundredweight for another, and three-tenths of 1 percent of gross value for another.



Potatoes must be sprayed with insecticides and fungicides in order to control insect pests and leaf diseases.

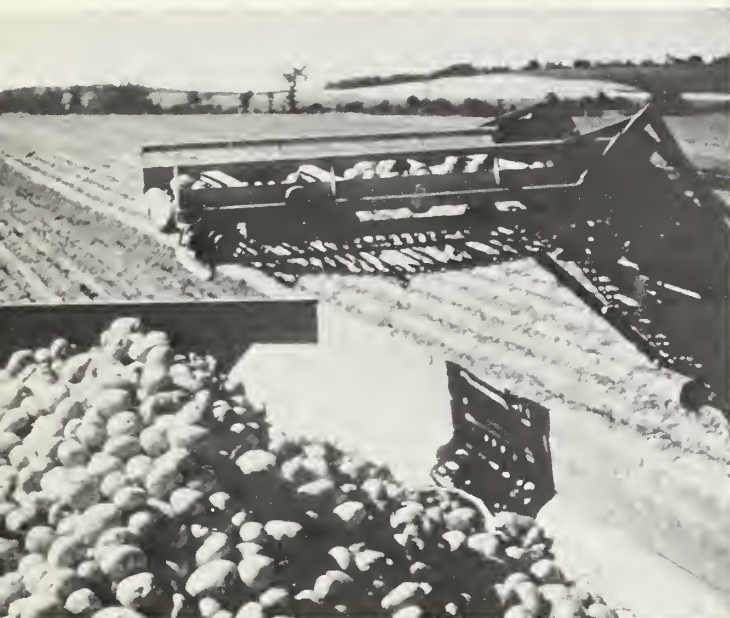
Services provided All associations published newsletters to keep growers informed about their own and other areas; this is especially important during negotiations. Three monitored the receiving and sampling procedures at processing plants. One provided a full-time field man and another published a market report.

Negotiations

In most cases, the associations used a growers' committee for negotiations. Directors or officers often were on these committees. If the bargaining covered a wide area, activities of the various committees were coordinated.

Processors negotiating The five associations negotiated with a total of 22 processors. The smallest number of processors that any one association negotiated with was two while the largest was nine. The average was about four processors per association.

The five associations did not negotiate with nine of the processors. Some processors were very small and were able to get their supplies from fresh shippers, while others simply refused to sit down and negotiate. Two plants were closed and a third was on shaky financial grounds.



Most U.S. potato crops are harvested by machine. The potatoes are dug mechanically and lifted to the top of the harvester where a crew of workers remove residual rocks, debris and damaged potatoes while they are on the move. The potatoes are conveyed to a truck moving alongside the harvester.

Following were some of the processors' tactics during the bargaining process:

Processor tactics	Associations experiencing
	<i>Number</i>
• Refused to meet with association representatives	3
• Circumvented the association and contracted with nonmembers	3
• Contacted members and contracted for potatoes	3
• Delayed meeting until after planting	2
• Threatened to close plant	2
• Threatened to bring in potatoes from other areas	2
• Produced their own potatoes	2
• Met but refused to bargain	1
• Refused contracts to association officers	1

Two associations each had faced six of these tactics, while one had faced five. Another association had faced only two. One association had not faced any because of a strong State bargaining law.

All five associations said price was the most difficult item to resolve in the bargaining process. Reasons included:

- The fact that quality is important and is tied to price;
- The association may not be bargaining with all the processors in the area and those that do bargain wonder why they have to pay a specified price;
- If growers are not committed to the association by a marketing contract, then the association does not present a united front in dealing with processors; and
- Sometimes growers and processors may be at odds over 1 cent per hundredweight and neither side will compromise.

Terms of trade were difficult to resolve. Some of these included premiums and discounts, time of payment, quality standards, quality measurement procedures, and delivery schedules.

Negotiation results In the case of four potato bargaining associations, the negotiations during the past fiscal year resulted in an "approved" contract between the grower and the processor. That is, the contract indicated on the face of it that it had been approved by the bargaining association. Each processor issued its own contract. In the other case, the contract was not marked "approved" but the processor again issued its own contract.



Types of contracts The principal types of contracts were field delivery to the plant, field delivery to company storage, and grower storage contracts. The same processor used different types of contracts. In some cases, the same contract might be drawn to provide for field delivery to the plant, field delivery to company storage, and grower storage.

The contracts provided for many differences. For example, storage allowance and shrink might be provided in a grower storage contract while premiums for early digging might be provided in a contract for field delivery to the plant.

The price arrived at in the bargaining process and written into the contract was usually a base price plus certain incentive premiums for quality and deductions for defects in the growers' potatoes.

Bargaining Legislation

State bargaining laws One of the five associations operated in a State with a bargaining law said the law had worked well. The feeling was that compulsory bargaining had improved relationships because each party knew where they stood.

Bargaining legislation was introduced in two other States where associations operated but did not pass. One association indicated that a State law would not work because chippers would buy their potatoes in States that did not have bargaining laws. In the other State, some members who had worked for the legislation did not get contracts with processors. This association thought it would be difficult to get State bargaining legislation.

Agricultural Fair Practices Act of 1967 Comments on the Agricultural Fair Practices Act were generally negative. The associations seemed to feel the legislation was ineffective, had no teeth, provides little relief to growers, and needs to be strengthened. They pointed out that there are no provisions for serious negotiations, no good faith bargaining requirements, and complaints are difficult to document.

Associations' attitudes toward legislation Four associations were in favor of additional bargaining legislation at the Federal level. Among the reasons given were: it would be one way to get growers to work together, it would prevent processors having plants in different areas from playing growers in one area against those in another, processors in all areas could be required to bargain in good faith, and it would improve the working relationships between growers and processors.

The five associations said they would support new national bargaining legislation mostly because they believe the Agricultural Fair Practices Act of 1967 is ineffective. Some expressed reservations about current attempts to revise the Act. One association did not think the legislation would work if fresh packers were included. Another indicated that if the legislation covered chippers, these firms would buy their chipping potatoes from areas that did not have bargaining associations. A third noted that there are cost variances in different areas so the growers rather than legislators will have to work out differences with processors. Finally, one association felt that national legislation requiring good-faith bargaining has little chance of being enacted.



A large proportion of the fall crop is stored. In the past many storages were built trackside; today most potatoes are shipped by truck. Many of these trackside storages are still being used.

Expected Changes

Industry changes in next 5 years Two associations expected to see some growers going out of business and fewer potatoes grown unless prices improve. The third expected a decrease in the number of growers with production remaining stable and fewer fresh packing plants in the area as more potatoes are shipped directly to chipping plants. Finally, a fourth expected the number of growers to remain stable and the fifth expected an increase in the number of growers.

Role of associations in next 5 years The five major potato bargaining associations are expected to have different roles in the next 5 years. One saw itself as being a major factor in the potato industry in its area. As such it would represent both fresh and processed potato growers. This would be somewhat of a departure from its role as representing potatoes going into processing plants only.

Another expected no changes but would continue as it has in the past, which included trying to negotiate better prices for growers and working out relationships between processors and growers.

Other viewpoints: Pulling growers together and committing them to the association until it represents a substantial proportion of the acreage, thus increasing its strength in dealing with processors; and pushing toward an improved 2-year contract.

Problem Areas

Three associations in the West and Midwest said transportation was their big problem because of higher costs due to longer distances from markets. One association noted there was always a shortage of trucks. Trucks deadheaded to the producing area to pick up potatoes, which increased costs. The solutions were to grow better quality, move the potatoes more efficiently, and use more advertising.

A problem high on the list of three cooperatives was grower commitment. Two associations worried about members dividing into splinter groups around processing plants and negotiating directly with processors. This had already happened at one association. At another, growers were not bound by a marketing contract and did as they pleased. These are difficult problems and require a careful evaluation to determine the best methods of obtaining member support.

A third category of problems is classified under processor tactics. Four of the five associations had these problems and gave them high priority. In one situation, two or three large nonmember growers participated with plant officials and field personnel to produce potatoes for the processor, circumventing the bargaining association. In a second case, the growers needed a contract and the processors knew it because there was a lack of alternative crops for growers to produce in this particular area. In a third situation, the association tried to get improved bargaining legislation at the State level. As a result, three association directors lost their contracts. A fourth said there was a threat by the processor to move to another area.

A fourth category of problems was the rising costs of fuel, electricity, and harvesting. An escalator clause was tried but did not work. Several items were included in the escalator but the figures came to 1 cent per hundredweight while producers costs had increased several times that amount. Growers wanted the escalator tied to the USDA prices paid farmers but were not successful. The general level of inflation was also a concern under this category.

Some individual problems could not be grouped into a single category. One association indicated that the problem in its area was too many potatoes. A second noted that bargaining had not been too successful in the past 10 years. A third performs functions other than bargaining.

POTATO MARKETING ASSOCIATIONS

Twenty-seven potato marketing cooperatives accounted for 3 percent of the total potato crop during 1977-81 (table 7). However, the proportion handled by these associations varied by season. They accounted for 9 percent of the winter crop, 6 percent of the spring crop, 10 percent of the summer crop, and 3 percent of the fall crop.

Selected utilization items The associations handled

potatoes for fresh tablestock, seed, and chips. The share by specific utilization was 8 percent of tablestock, 8 percent of seed sales, and 5 percent of chip sales (table 8). The share handled for the three utilized purposes was 7 percent.

Area served Although the share of the potato crop handled by cooperatives was small when measured against the total U.S. crop, cooperatives were more important in the local areas. The 27 cooperatives served producers on an average of 3 counties per association.

Producers served The associations served 2,241 members and 231 nonmembers (table 9). Seventy percent of the growers were in the fall crop areas, 21 percent in the summer, 4 percent in the spring, and 5 percent in the winter crop areas.

Services Potato marketing associations performed many services in addition to selling potatoes. More than 40 percent sold farm supplies (table 10). Almost a third furnished production services including aerial spraying, dusting, harvesting, and other services. More than a third graded and packed potatoes and sold packing supplies to growers.

Some associations supplied various combinations of services. More than a fourth provided farm supplies, production

Table 7—Share of U.S. potato crop handled by 27 marketing cooperatives by seasons, 1977-81

Season	1977	1978	1979	1980	1981	1977-81 average
<i>1,000 cwt.</i>						
U.S. crop						
Winter	2,660	2,621	2,383	2,363	2,198	2,445
Spring	22,867	17,896	21,348	17,067	20,765	19,989
Summer	21,839	20,941	21,847	16,999	20,035	20,332
Fall	307,968	324,856	296,919	266,428	295,593	298,353
Total	355,334	366,314	342,497	302,857	338,591	341,119
Cooperatives						
Winter	250	287	222	186	215	232
Spring	1,295	1,229	1,432	1,058	1,155	1,234
Summer	2,210	1,998	2,096	2,270	1,912	2,097
Fall	8,158	8,636	8,025	8,241	8,385	8,289
Total	11,913	12,150	11,775	11,755	11,667	11,852
Percentage of U.S. crop handled by co-ops						
<i>Percent</i>						
Winter	9.4	10.9	9.3	7.9	9.8	9.5
Spring	5.7	6.7	6.7	6.2	5.6	6.2
Summer	10.1	9.5	9.5	13.3	9.5	10.3
Fall	2.6	3.5	2.7	3.1	2.8	2.8
Total (all crops)	3.4	3.3	3.4	3.9	3.4	3.5

services, and marketing services. About a fifth provided both farm supplies and marketing services. A third provided various combinations of marketing services to growers. A fifth sold potatoes only.

Grower payment methods Four-fifths of the associations sold potatoes for the growers' individual account (table 11). The association sold the potatoes for the grower and credited the account with returns from the sale less marketing costs. The grower was paid when the association received payment from the buyer. Diligent efforts were made to collect from the buyer within a reasonable time. In some cases, the grower might be given an advance to continue harvesting operations. Where the cooperative was selling and the grower doing the grading, it was the growers' responsibility to keep the potatoes up to grade. If a dispute occurred over the grade, payment to the grower could be delayed.

Table 10—Services performed by 27 potato marketing cooperatives, 1981

Services performed	Associations furnishing	
	Number	Percent
Farm supplies	11	41
Production services	8	30
Marketing: ¹		
Selling potatoes	27	100
Washing	6	22
Grading	10	37
Packing	10	37
Storing	3	11
Selling packing supplies....	10	37

¹Many associations performed more than one marketing service.

Table 8—Share of selected utilization items handled by 27 potato marketing cooperatives 1977-81

Utilization items	1977	1978	1979	1980	1981	1977-81 average
<i>1,000 cwt.</i>						
U.S. crop						
Fresh tablestock.....	117,171	112,096	114,957	96,817	110,639	110,336
Seed.....	21,028	19,990	18,179	19,152	20,503	19,771
Chips	36,874	37,333	37,548	37,131	37,585	37,294
Total	175,073	169,419	170,684	153,100	168,727	167,401
Cooperatives						
Fresh tablestock.....	8,473	8,793	8,200	8,548	8,362	8,475
Seed.....	1,641	1,591	1,736	1,600	1,693	1,652
Chips	1,799	1,766	1,839	1,607	1,612	1,725
Total	11,913	12,150	11,775	11,755	11,667	11,852
<i>Percent</i>						
Percentage of U.S. crop handled by co-ops						
Fresh tablestock.....	7.2	7.8	7.1	8.8	7.6	7.7
Seed.....	7.8	7.9	9.5	8.3	8.3	8.4
Chips	4.9	4.7	4.9	4.3	4.3	4.6
Total (all above items)	6.8	7.2	6.9	7.7	6.9	7.1

Table 9—Membership in 27 Potato marketing cooperatives, by crop season, 1981

Crop season	Associations	Members	Nonmembers	Producers served		
				Total	Average	Range
<i>Number</i>						
Fall.....	13	1,573	155	1,728	133	7-855
Summer.....	9	524	10	534	59	5-175
Spring.....	3	90	—	90	30	6- 60
Winter.....	2	54	66	120	60	15-105
Total.....	27	2,241	231	2,472	92	5-855

Table 11 — Grower payment methods of 27 potato marketing cooperatives, 1981

Grower payment methods	Associations
	<i>Number</i>
Individual growers' account.....	22
Pool payment plan.....	4
Outright purchase plan.....	2
Total.....	¹ 28

¹Total exceeds 27 because one association use more than one method.

Four associations used a pool payment plan. Potatoes were pooled according to grade and payment made to growers on the basis of the average price received for each pool.

Two associations used the outright purchase plan. The potatoes were purchased from the grower and then resold at a price that would enable the association to recover the purchase price plus its operating costs.

Discussions were held with seven selected potato marketing associations. These associations accounted for from 52 to 56 percent of the volume marketed by the 27 potato marketing associations between 1977 and 1981. They also accounted for 61 percent of the membership in 1981.

Organization and Operation

Membership Memberships varied greatly, ranging from 8 to 855, with an average of 195 per association. One was a federated association with five locals handling potatoes. Membership fees ranged from \$1 to \$25 with the latter amount the most common. In some associations a grower was required to buy a share of stock to be a member. The rule on voting was one member, one vote regardless of the number of shares of stock owned.

Marketing contracts Four associations did not have marketing contracts with members. Contracts can be important in encouraging grower commitment. The association is assured a given quantity of potatoes to sell, which makes it easier to attract customers.

Services furnished Four associations provided nearly a full line of supplies to potato growers. Three offered fertilizing and spraying and/or dusting services. Two of the three used contractors for these services and one also furnished a field representative to advise growers.

All associations provided some type of marketing service. Three operated packing facilities, including grading, washing or cleaning, packaging, and storing potatoes. The storages were owned by growers but managed by the associations. In addition to selling potatoes for its local members, the federated association provided data processing and supplied a line of credit to them. In four associations, growers graded and packed their own potatoes.

Facilities The value of facilities varied according to services performed.

Type facility	Association	Facilities	Average value
	<i>Number</i>		<i>Dollars</i>
Packing	¹ 3	10	515,053
Sales office building	2	2	35,000
Office space only	2	2	9,625

¹The federated association had locals with six packing plants and a local association had three plants.

Three associations had facilities for packing potatoes in consumer-size or bulk packages for sale. Two associations had sales office buildings. One of these had space for a small inventory of packing supplies.

Two associations had offices for selling potatoes only. The potato sales department was only one department in the organization. The rental space and office equipment used for potato sales were assigned a value.

Three associations indicated they were using facilities at 100 percent of capacity. Four felt their facilities were not being utilized to full capacity and sales could be expanded without adding more facilities. Six associations did not plan to increase facilities during the next 5 years.

Employees The number of employees varied greatly among the associations. Those involved in washing, grading, packing, and selling potatoes, averaged about 38 per plant. Those involved in selling only, averaged about five. The number of employees also varied according to the services rendered and number of members served. Some associations were involved in other activities but only employees in potato operations were counted.

Directors The number of directors of the 7 potato marketing associations varied from 6 for the smallest to 18 for the largest. The average was about 11 per association.

Other cooperatives in area Potato bargaining associations operated in the areas served by five marketing associations. Four had members who also belonged to the bargaining



The packing of tablestock potatoes has been highly mechanized. However, human hands are still necessary to insure a quality stock. Workers remove pickouts as potatoes pass before them on their way to packaging for shipment.

associations. Two or three members of the board of directors of one association were members of a bargaining association. The number of members also having memberships in the bargaining associations varied widely.

Four associations with bargaining associations in their areas said they did not affect operations because there was no conflict. The marketing associations sold tablestock while the bargaining associations bargain with processors for processing potatoes. Growers decide whether they want to sell in the fresh market or contract with processors (fig. 5). The four associations did not see bargaining associations affecting their operations in the future.

Major benefits The most important benefit was increased returns to growers. Other important benefits were more orderly marketing through grower cooperation, and additional services.

Most of the associations felt they were holding a price umbrella for other producers in their particular areas. Fresh potato buyers benefited by the assembling of potatoes and prompt shipment. The associations selling supplies to chippers rendered a service by assembling potatoes and having the raw product available for shipment to plants on a daily basis.

Payments to Member Growers

The three typical methods of payment were used by the seven potato marketing associations:

Method of payment	Associations ¹		Total volume
	Number	Percent	
Individual growers' account	5	63	
Outright purchase plan	2	25	
Pool payment plan	1	12	

¹One association used two different methods.

The individual growers' account was used exclusively by five associations to pay for about two-thirds of the potatoes sold. Two associations used an outright purchase plan that accounted for one-fourth of the total volume. One used this plan exclusively and paid the growers within 10 days. The other used a pool payment plan for three-fourths of its volume and the outright purchase plan for the remainder. The association operates a seasonal or weekly pool depending on the circumstances. None of the associations anticipated changing payment methods over the next 5 years.

Grower payment options One association gave the grower an option as to time of payment, including an advance. In another association, growers at one packing plant were given an option on time of payment while growers at other plants

were not. This was because the plant had been built before the others and the growers at this particular plant had become accustomed to having an option.

Five associations did not give growers any option as to time of payment. In one association, however, a grower had a storage bin and could select the time to sell. The grower was paid when the association received payment from the buyer. In two other associations the grower with private storage could select the time to sell. However, the grower had no control over the time of payment.

Marketing charges There was a wide variation in the charges for marketing growers' potatoes.

Growers in four associations stored potatoes on their own farms, used special storage facilities or shipped potatoes direct without storage. Growers in three associations owned storage facilities located on the premises of the associations and managed by them.

Broker charges varied from 7 cents to 40 cents per hundredweight. The average was 18 cents per hundredweight for the five associations having brokerage fees. Packing including washing and cleaning averaged \$1.73 per hundredweight.

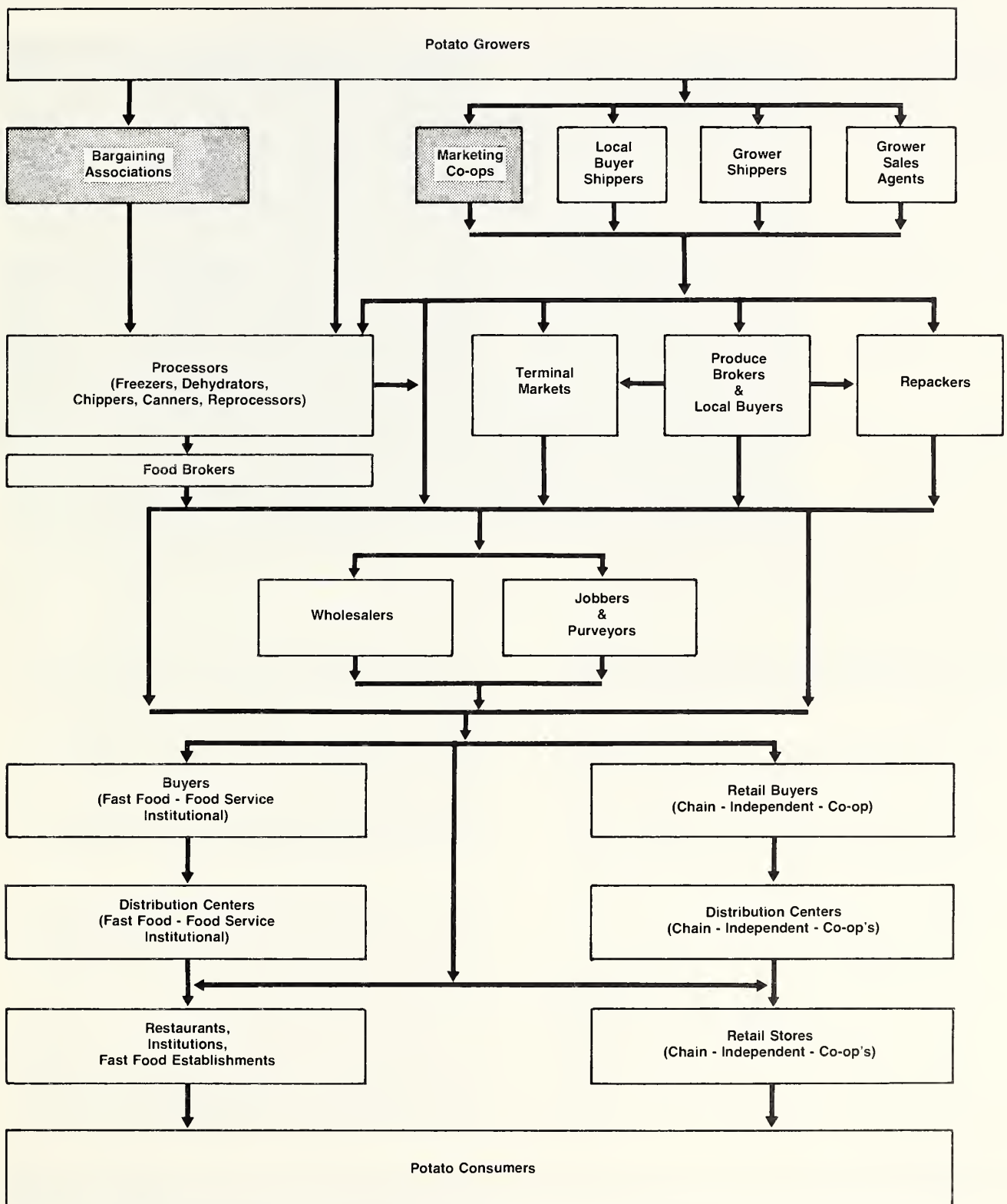
Selling Arrangements

Six associations sold direct and through brokers. The seventh sold all of its members' potatoes direct. Seventy-one percent of sales were made direct while 29 percent were made through brokers. The range in volume of individual associations using the direct sales method was from 50-100 percent while the range of those using brokers was from 10-50 percent. Although a high percent of sales were direct, the possibility of making more direct sales should probably be considered.

Method of shipping The seven associations shipped 96 percent of their combined volume by truck and the remainder by rail. Five shipped exclusively by truck. Two used trucks for 90 percent of their volumes and relied on rail for only 10 percent. The possibility of increasing rail shipments should probably be explored to see if it is now more competitive with trucks. The current high energy costs may have brought rates more in line.

Type of sale Six associations used a combination of delivered and f.o.b. sales. One made delivered sales only. Delivered sales accounted for 57 percent while f.o.b. sales accounted for 43 percent of all sales. F.o.b. sales ranged from a low of 10 percent for one association to a high of 75 percent for another. Delivered sales ranged from a low of 25 percent for one to a high of 100 percent for another.

Figure 5—Major Marketing Channels for Potatoes



The seller assumes all risks of loss or damage in transit not caused by the buyer in the delivered sale. The buyer assumes all risk of damage and delay in transit that is not caused by the seller in the f.o.b. sale. Perhaps it would be desirable to increase the percentage of f.o.b. sales to reduce the risks to the associations or the individual grower.

Grading and Inspection

An almost equal proportion of the total sales of the seven associations was inspected by growers and the Federal-State Inspection Service.

Inspected by	Associations ¹		Total sales
	Number	Percent	
Growers	4	45	
Federal-State Inspection Service	5	44	
The association	2	11	

¹Four associations used two different methods of inspection.

Five associations used the Federal-State Inspection Service. One used it for 100 percent of sales volume while the other four varied from 10 percent to 80 percent.

Two of four associations using grower inspection relied on it for 100 percent of sales volume. The other two relied on grower inspection for 33 percent and 90 percent of sales, respectively.

Two associations inspected part of their sales. One inspected 20 percent of sales while the other inspected 90 percent.

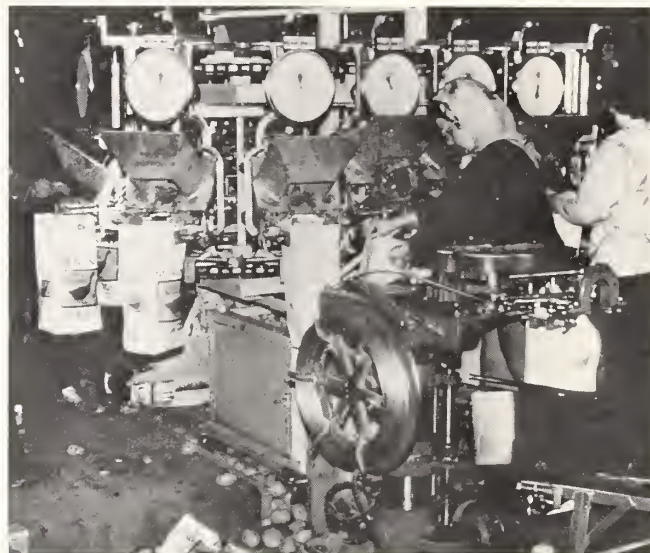
Greater use of the Federal-State Inspection Service would probably be desirable. Four associations relied on grower inspection for a high percentage of their sales.

Brand Policies

All associations sold potatoes under their own labels.

Type label	Associations ¹		Total sales
	Number	Percent	
Association labels	7	72	
Grower labels	2	12	
Chain store labels	1	3	
Other buyer labels	1	2	
Sold unlabeled	2	11	

¹Six associations sold under two different types of labels.



Potatoes being packed in bags for shipment. The packing shed is usually located adjacent to potato storages. Tablestock is packed in various sizes from 100 pound burlap bags, to 50, 25, 20, 15, 10, 8, and 5 pound paper, polyethylene, or mesh bags.

Associations selling under their own labels ranged from 10 to 100 percent in volume sold. One sold 100 percent under its own label. Two sold 30 percent and 40 percent under grower labels. One sold 10 percent of its volume under chain store labels while another sold 20 percent under other buyer labels. Finally, two associations sold 33 percent and 90 percent unlabeled to chippers.

About 28 percent of the potatoes were not sold under association labels. Greater emphasis should be placed on shipping potatoes under association labels.

Four associations seemed optimistic about the value of brands during the next 5 years. They said brands probably will be more important. Two thought there would be no change in the value of brands. The seventh association thought generic and private labels would take over.

The associations expended only nominal sums on advertising and promotion. Associations furnishing data spent a total of about \$16,000 on promotion, averaging about \$4,000 per association. However, the range was from \$1,000 for the smallest expenditure to about \$6,000 for the largest.

The most widely used forms of promotion were ads in the Packer and listings in the produce Blue Book. In addition, four associations sent salespeople to call on buyers. Two had exhibits at county fairs and trade association conventions.



Potatoes being packed in cartons for shipment. Cartons are used for premium packs of uniformly-sized tablestock potatoes, which are often sold by count. Cartons are thought to provide an additional measure of protection to the potatoes in shipment.

Only one used point-of-purchase materials. The associations did not anticipate any change in promotional policies over the next 5 years.

Pricing Policies

The seven associations followed flexible policies in determining the day-to-day prices quoted for potatoes. The Federal-State Market News Service and telephone contacts with the trade were the sources most frequently used.

In addition, one association had market contracts with growers agreeing to purchase their potatoes at a given price, then sold them for enough to cover its costs. The sales manager of a second association kept a chart that gave him an idea on long-range pricing. This association considered the f.o.b. price, delivered price, and truck rates, before the actual price was determined for a given load. A third association discussed prices with growers before negotiating with chippers. The association contracted with chippers for a specific volume, and then contracted with growers. None of the seven associations anticipated any changes in pricing policies over the next 5 years.

The Next 5 Years

All seven potato marketing associations thought there would be a decrease in the number of potato growers in the next 5 years (table 12). They felt there would be fewer but larger

Table 12—Expected changes in the industry in the next 5 years by seven potato marketing cooperatives, 1981

Facts or activities	Increase	No change	Decrease
Number of associations			
Number of growers	0	0	7
Number of buyers	1	3	3
Growers delivering better quality	5	2	0
Buyers requesting better quality	5	2	0
Direct buying by chain stores	1	6	0
On farm storage	4	1	2
Growers' willingness to market cooperatively	1	6	0
Processors becoming growers	0	3	4
Bargaining activity	3	4	0
Processing activity	3	2	2
Fresh marketing	1	3	3
Seed potato activity	1	6	0

growers in their areas. Some smaller operations were unprofitable and the small growers were expected to sell potato land to larger growers, they said. Also, growers were switching from potatoes to other crops.

Five associations felt growers would be delivering better quality potatoes because of new and better varieties, improved fertilizers, and a decline in the number of growers producing low-quality potatoes. Also, five associations believed buyers would be asking for better quality potatoes. However, six associations expected no change in direct buying by chain stores.

Six associations believed cooperative activity would remain about stable. Despite open membership, they had not seen any marked interest by growers in joining the associations. One said growers were working against themselves by breaking away and trying to become grower-shippers, thereby undermining the association. Four associations expected an increase in farm storages.

Three associations expected fresh marketing activity to remain about the same or stable. Three expected it to decrease. Six associations felt there would be no change in seed potato activity.

Problem Areas

The seven associations held widely divergent views concerning the nature of the problems faced by the industry in their respective areas during the next 5 years.

Governmental policy and programs Several problems were cited where governmental policy or programs might be involved. Two associations noted international trade was a problem. One wanted to encourage potato exports and recommended an export subsidy if necessary. It also said food should have a higher priority in planning U.S. foreign policy. The second association maintained that imports were being dumped into its area and wanted to limit them.

Five associations cited instability in the industry for various reasons, including fluctuating supplies and rising costs. One thought the Government's help was needed to stabilize supplies because the association could not solve the problem alone. Another felt that overproduction was a problem. It found it difficult to dispose of strippers and thought there should be more processing in the area. A third association thought the effects of Government support programs in other crops, for instance grain in other areas, made it possible for growers to gamble on potato crops.

One association thought the cost of packing supplies would continue to increase in its area, thus increasing growers' costs. Inflation control was the suggested solution to that problem. A second association was concerned about returns versus

costs. It said there would be many bankrupt farmers in the area and the Farmers Home Administration was not the answer.

One association said the availability of marketing information in the area would be a problem. It thought The Federal-State Market News Service overstated the price in other areas while those areas undersold them. The suggested solution was to get the correct information. It maintained that actual sales were needed.

Quality Two associations were concerned about improved varieties. More research to develop new varieties adaptable to their areas seemed to be the solution.

One association said storage breakdown due to natural causes was a problem and modern storage was needed for chip stock potatoes. This type of storage differs from tablestock storage. Proper storage over a longer period would help the association maintain its share of the market.

One association thought the industry needed to pay more attention to the consumer. Potatoes should be sized before being sold, they said.

Share of market Competition was an important problem to two associations. One was concerned about maintaining its share of the market at a reasonable return to growers. The other worried about competition from other areas during its sales period. The seven marketing associations had from 3 to 100 competitors in their particular areas. The average was 27 per association. Also, most of the associations were in the fall-producing States. There is much overlapping of marketing periods especially with existing storage facilities. To maintain market share under these conditions would require member loyalty, an aggressive sales program, and good storage facilities.

Transportation One association said few goods were returning to their area so trucks had to deadhead in to haul out potatoes. This resulted in higher freight rates. The same problem was mentioned by the bargaining association in the area.

**U.S. Department of Agriculture
Agricultural Cooperative Service**

Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents develop co-operatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international co-operative programs.

ACS publishes research and educational materials and issues *Farmer Cooperatives* magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.